Curriculum Vitæ LAURIE C. MURPHY August 2023

Pacific Lutheran University Department of Computer Science Tacoma, WA 98447 253.535.8729 (office) lmurphy@plu.edu www.cs.plu.edu/~murphylc

ACADEMIC APPOINTMENTS

Pacific Lutheran University, Tacoma, Washington
Chair, Department of Computer Science – 2014 to 2020, 2023 to present
Professor of Computer Science – 2022 to present
Associate Professor of Computer Science, tenured – 2006 to 2022
Assistant Professor of Computer Science – 2000 to 2006
Visiting Assistant Professor of Computer Science – 1997 to 2000
University of Mississippi, Oxford, Mississippi
Instructor of Computer and Information Science – 1988 to 1997
Vanderbilt University, Nashville, Tennessee
Graduate Research Assistant, Department of Computer Science – 1986 to 1987

EDUCATION

Vanderbilt University, Nashville, Tennessee, M.S. in Computer Science – 1988 Delta State University, Cleveland, Mississippi, B.S. in Mathematics – 1986

UNIVERSITY TEACHING

Pacific Lutheran University

Introduction to Computer Science, Java (CSCI 144) Data Structures, Java & C++ (CSCI 270) Programming Language Concepts (CSCI 343) Design & Analysis of Algorithms (CSCI 371) Special Topic: Mobile App Development (CSCI 389) Special Topic: Introduction to iOS App Development with Swift (CSCI 487) Special Topic: Unix System Design (CSCI 487) Senior Capstone (CSCI 499 A&B) Solve it with the Computer, Python & spreadsheets (CSCI 115) Virtual Worlds with Alice (CSCI 130) Computerized Information Systems, Excel (CSCI 120)

University of Mississippi

Computer Programming I & IIComputer SimulationFile SystemsAlgorithmsComputer Organization & Assembly LanguageFormal Language TheoryC++ ProgrammingComputer Science SurveyAutomata TheoryPersonal Computer ISpecial Topic: Unix & C for Engineers, Graduate Engineering Program - Jackson, MS

RESEARCH INTERESTS

Computer science education, debugging, pair programming, recursion, pedagogy, teaching practices, broadening participation in computer science

CONFERENCE & JOURNAL PUBLICATIONS (peer-reviewed)

- Scott Grissom, Renée Mccauley, and Laurie Murphy. 2017. How Student Centered is the Computer Science Classroom? A Survey of College Faculty. *Transactions on Computing Education*, 18:1, Article 5 (March 2018), 27 pages.
- Scott Grissom, Sue Fitzgerald, Renée McCauley, and Laurie Murphy. 2017. Exposed! CS Faculty Caught Lecturing in Public: A Survey of Instructional Practices. In Proceedings of the 2017 ACM SIGCSE Technical Symposium on Computer Science Education (SIGCSE '17), 261–266. Seattle, Washington, March 2017.
- Scott Grissom, Laurie Murphy, Renée McCauley, and Sue Fitzgerald. 2016. Paper vs. Computer-based Exams: A Study of Errors in Recursive Binary Tree Algorithms. In *Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16)*, 6–11. Memphis, Tennessee, March 2016.
- Laurie Murphy, Sue Fitzgerald, Scott Grissom, and Renée McCauley. 2015. Bug Infestation! A Goal-Plan Analysis of CS2 Students' Recursive Binary Tree Solutions. In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15)*, 482–487. Kansas City, Missouri, March 2015.
- Renée McCauley, Brian Hanks, Sue Fitzgerald, and Laurie Murphy. 2015. Recursion vs. Iteration: An Empirical Study of Comprehension Revisited. In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15)*, 350–355. Kansas City, Missouri, March 2015.
- Renée McCauley, Scott Grissom, Sue Fitzgerald and Laurie Murphy. 2015. Teaching and learning recursive programming: a review of the research literature, *Computer Science Education*, 25:1, 37-66.
- Malcolm Corney, Sue Fitzgerald, Brian Hanks, Raymond Lister, Renée McCauley, and Laurie Murphy. 2014. 'Explain in plain English' questions revisited: data structures problems. In *Proceedings of the 45th ACM technical symposium on Computer science education (SIGCSE '14)*, 591–596. Atlanta, Georgia, March 2014.
- Sue Fitzgerald, Brian Hanks, Raymond Lister, Renée McCauley, and Laurie Murphy. 2013. What are we thinking when we grade programs? In *Proceedings of the 44th ACM technical symposium on Computer science education (SIGCSE '13)*, 471–476. Denver, Colorado, March 2013.
- Laurie Murphy, Sue Fitzgerald, Raymond Lister, and Renée McCauley. 2012. Ability to 'explain in plain English' linked to proficiency in computer-based programming. In *Proceedings of the ninth annual international conference on International computing education research (ICER '12)*, 111–118. Auckland, New Zealand, September 2012.
- Laurie Murphy, Renée McCauley, and Sue Fitzgerald. 2012. 'Explain in plain English' questions: implications for teaching. In *Proceedings of the 43rd ACM technical symposium on Computer Science Education (SIGCSE '12)*, 385–390. Raleigh, North Carolina, March 2012.
- Brian Hanks, Sue Fitzgerald, Renée McCauley, Laurie Murphy and Carol Zander. 2011. Pair programming in education: a literature review, *Computer Science Education*, 21:2, 135-173.
- Laurie Murphy, Sue Fitzgerald, Brian Hanks, and Renée McCauley. 2010. Pair debugging: a transactive discourse analysis. In *Proceedings of the Sixth international workshop on Computing education research* (*ICER* '10), 51–58. Aarhus, Denmark, August 2010.
- Sue Fitzgerald, Renée McCauley, Brian Hanks, Laurie Murphy, Beth Simon and Carol Zander. 2010. Debugging From the Student Perspective, *IEEE Transactions on Education*, 53:3, 390-396.
- Laurie Murphy and David Wolff. 2009. Creating video podcasts for CS1: Lessons learned, *Journal of Computing Sciences in Colleges*, 25:1, 152-158.

- Beth Simon, Brian Hanks, Renée McCauley, Briana Morrison, **Laurie Murphy**, and Carol Zander. 2009. For me, programming is ... In *Proceedings of the Fifth international workshop on Computing education research* (*ICER* '09), 105–116. Berkeley, California, August 2009.
- Anders Berglund, Anna Eckerdal, Arnold Pears, Philip East, Päivi Kinnunen, Lauri Malmi, Robert McCartney, Jan-Erik Moström, Laurie Murphy, Mark Ratcliffe, Carsten Schulte, Beth Simon, Ioanna Stamouli and Lynda Thomas. 2009. Learning computer science: perceptions, actions and roles, *European Journal of Engineering Education*, 34:4, 327-338.
- Carol Zander, Lynda Thomas, Beth Simon, Laurie Murphy, Renée McCauley, Brian Hanks, and Sue Fitzgerald. 2009. Learning styles: novices decide. In *Proceedings of the 14th annual ACM SIGCSE conference on Innovation and technology in computer science education (ITiCSE '09)*, 223–227. Paris, France, June 2009.
- Brian Hanks, Laurie Murphy, Beth Simon, Renée McCauley, and Carol Zander. 2009. CS1 students speak: advice for students by students. In *Proceedings of the 40th ACM technical symposium on Computer science education (SIGCSE '09)*, 19–23. Chattanooga, Tennessee, March 2009.
- Beth Simon, Brian Hanks, **Laurie Murphy**, Sue Fitzgerald, Renée McCauley, Lynda Thomas, and Carol Zander. 2008. Saying isn't necessarily believing: influencing self-theories in computing. In *Proceedings of the Fourth international Workshop on Computing Education Research (ICER '08)*, 173–184. Sydney, Australia, September 2008.
- Laurie Murphy and Lynda Thomas. 2008. Dangers of a fixed mindset: implications of self-theories research for computer science education. In *Proceedings of the 13th annual conference on Innovation and technology in computer science education (ITiCSE '08)*, 271–275. Madrid, Spain, June 2008.
- Renée McCauley, Sue Fitzgerald, Gary Lewandowski, Laurie Murphy, Beth Simon, Lynda Thomas and Carol Zander. 2008. Debugging: a review of the literature from an educational perspective, *Computer Science Education*, 18:2, 67-92.
- Sue Fitzgerald, Gary Lewandowski, Renée McCauley, **Laurie Murphy**, Beth Simon, Lynda Thomas & Carol Zander. 2008. Debugging: finding, fixing and flailing, a multi-institutional study of novice debuggers, *Computer Science Education*, 18:2, 93-116.
- Laurie Murphy, Gary Lewandowski, Renée McCauley, Beth Simon, Lynda Thomas, and Carol Zander. 2008. Debugging: the good, the bad, and the quirky -- a qualitative analysis of novices' strategies. In *Proceedings of the 39th SIGCSE technical symposium on Computer science education (SIGCSE '08)*, 163–167. Portland, Oregon, March 2008.
- Arnold Pears, Anders Berglund, Anna Eckerdal, Phillip East, Päivi Kinnunen, Lauri Malmi, Robert McCartney, Jan-Erik Moström, Laurie Murphy, Mark B. Ratcliffe, Carston Schulte, Beth Simon, Iona Stamoulia, and Lynda Thomas. 2007. What's the problem? teachers' experience of student learning successes and failures. In Proceedings of Koli Calling, 7th Baltic Sea Conference on Computing Education Research, 207-211. Koli National Park, Finland, November 2007.
- Päivi Kinnunen, Robert McCartney, Laurie Murphy, and Lynda Thomas. 2007. Through the eyes of instructors: a phenomenographic investigation of student success. In *Proceedings of the third international workshop on Computing education research (ICER '07)*, 61–72. Atlanta, Georgia, August 2007.
- Laurie Murphy, Brad Richards, Renée McCauley, Briana B. Morrison, Suzanne Westbrook, and Timothy Fossum. 2006. Women catch up: gender differences in learning programming concepts. In *Proceedings of the* 37th SIGCSE technical symposium on Computer science education (SIGCSE '06), 17–21. Houston, Texas, March 2006.
- Josh Tenenberg and Laurie Murphy. 2005. Knowing what I know: An investigation of undergraduate knowledge and self-knowledge of data structures, *Computer Science Education*, 15:4, 297-315.
- Laurie Murphy and David Wolff. 2005. Take a minute to complete the loop: using electronic Classroom Assessment Techniques in computer science labs. *Journal of Computing Sciences in Colleges*, 21:1 (October 2005), 150–159.

- Renée McCauley, **Laurie Murphy**, Suzanne Westbrook, Susan Haller, Carol Zander, Timothy Fossum, Kate Sanders, Briana Morrison, Brad Richards and Ruth Anderson. 2005. What do successful computer science students know? An integrative analysis using card sort measures and content analysis to evaluate graduating students' knowledge of programming concepts. *Expert Systems*, 22:3, July 2005.
- K. Sanders, D. Bouvier, S. Fincher, G. Lewandowski, B. Morrison, L. Murphy, M. Petre, J. Tenenberg, L. Thomas, R. Anderson, R. Anderson, S. Fitzgerald, A. Gutschow, S. Haller, M. Jadud, R. Lister, R. McCauley, J. McTaggart, C. Prasad, B. Richards, T. Scott, D. Shinners-Kennedy, S. Westbrook, and C. Zander. 2005. A multi-institutional, multinational study of programming concepts using card sort data. *Expert Systems*, 22:3, July 2005.
- Laurie Murphy and Josh Tenenberg. 2005. Do computer science students know what they know? a calibration study of data structure knowledge. In *Proceedings of the 10th annual SIGCSE conference on Innovation and technology in computer science education (ITiCSE '05)*,148–152. Monte de Caparica, Portugal, June 2005.
- Laurie Murphy, Renée McCauley, Suzanne Westbrook, Timothy Fossum, Susan Haller, Briana B. Morrison, Brad Richards, Kate Sanders, Carol Zander, and Ruth E. Anderson. 2005. A multi-institutional investigation of computer science seniors' knowledge of programming concepts. In *Proceedings of the 36th SIGCSE technical symposium on Computer science education (SIGCSE '05)*, 510–514. St. Louis, Missouri, February 2005.
- Kenneth D. Blaha and Laurie Murphy. 2001. Targeting assessment: how to hit the bull's eye. *Journal of Computing Sciences in Colleges*, 17:2, (December 2001), 112–121.

BOOK CHAPTER

Sally Fincher, Josh Teneneberg, Brian Dorn, Christopher Hundhausen, Robert McCartney and Laurie Murphy,
"Computer Education Research Today" in *The Cambridge Handbook of Computing Education Research*, S.
A. Fincher & A. V. Robins Eds., Cambridge University Press, pp 40-55, 2019.

GRANTS & AWARDS

PLU Faculty Excellence Award in Service, December 2022

- PLU Teaching and Learning with Technology (TLT) Grant to fund "Social Media and Video Podcasts to support a new course in Media Computation," 2011-2012.
- Computing Research Association's Committee on the Status of Women in Computing Research (CRA-W) travel grant to attend career mentoring workshop, November 2012.
- Northwest Academic Computing Consortium (NWACC) Proof of Concept Grant to fund "Scaffolding active programming instruction with theoretically grounded screencasts and annotated worked examples," with David Wolff, 2008-2009.
- PLU Regency Advancement Award to fund "An Investigation of Novice Pair Debugging," 2008-2009.
- NSF funding to attend STEM Workshop on Active Learning, UC San Diego, July 2008.
- NSF funding to attend DEBUG summer research workshops, May 2007 and May 2008.
- Inspirational Woman award from the PLU Women's Center, 2006.
- NSF travel grant to attend ICER '06, Sept. 2006, University of Kent, Canterbury, UK.
- CRA-W Collaborative Research Experiences for Undergraduates (CREU) grant to fund "Electronic Assessment Tools for Introductory Computer Science: Enabling Feedback from the Laboratory to the Classroom," with D. Wolff, 2004-2005.
- NSF funding to attend Bootstrapping Research in Computer Science summer workshops, June 2002 and June 2003.
- CRA-W travel grants to attend SIGCSE and CRA-W workshop, March 2002.
- PLU Center for Teaching and Learning Grant, "Project Based Peer-Mentoring," with Kenneth Blaha, 2001.

PROFESSIONAL ACTIVITIES

Editing:

Co Editor-In-Chief, Computer Science Education, Taylor & Francis publishers, 2007-2017

Professional Societies:

Association for Computing Machinery (ACM)

Special Interest Group for Computer Science Education (ACM-SIGCSE)

SIGCSE Board, At-Large Member: 2019-2022

Special Project Grants Review Committee (Chair)

Authored special project award reports for the SIGCSE Bulletin

Travel Grants Review Committee (Member)

Liberal Arts Committee Liaison

Consortium for Computing Sciences in Colleges - Northwest (CCSC-NW)

Computer Science Teachers Association (CSTA)

Panels, Committees and Invited Talks:

- Workshop presenter, "Student-Centered Instruction in Computer Science Education," PLU Dale E. Benson Innovation Studies Workshop, October 2018.
- Invited presenter, "Pairs, Peers and Perceptions of Self: Putting Computer Science Education Research into Practice," Whitworth University, March 2016.
- Co-facilitator, SIGCSE Committee on Evidence-based Instructional Practices, December 2015-present.
- Invited panelist, "Developing Videos and Screencasts!" for the PLUTO Online Institute, January 2015 and January 2016.
- Invited panelist and presenter, "Preparing Graduates for Big Data," PLU eBusiness Day, December 2013.
- Panelist, "Report on Qualitative Research Methods Workshop" at SIGCSE 2011, Dallas, Texas.
- Invited panelist, PLU Psychology 315: Psychology of Women panel on women in male dominant fields, Spring 2010.
- Invited presentation, "Debugging Computer Science Education," PLU Faculty Scholarship Dinner, October 2007.
- Presenter with J. Tenenberg et al, "Building a Disciplinary Commons using Course Portfolios," Pacific Northwest Higher Education Teaching and Learning Conference, Vancouver, Washington, May 2006.
- K-12 Outreach panel participant, CCSC-NW Conference, University of Washington, Bothell, October 2005.
- Invited member of a panel on Teaching Positions at Teaching Oriented Universities given to University of Washington (Seattle) CE and EE graduate students, May 2004.
- Invited speaker on Teaching CS1 and CS2 for the Education and Educational Technology Graduate Seminar at the University of Washington (Seattle), May 2003.
- Accreditation panel participant, CCSC-NW Conference, Pacific Lutheran University, Tacoma, Washington, October 2001.
- Active and Cooperative Learning panel organizer and participant, CCSC-NW Conference, Seattle Pacific University, October 2002.

Panels and Tutorials Chair, CCSC-NW Conference, 2001-2002.

Conferences, Workshops and Courses Attended:

Mobile Application Development in Flutter SIGCSE workshop, Providence, Rhode Island, March 2022. Free Ebooks for Computer Science Courses SIGCSE workshop, Providence, Rhode Island, March 2022. Washington State Why CS Summit (remote), October 2021.

- Microsoft Technology Education and Literacy in Schools (TEALS) Volunteer Training, Summer 2021.
- ITiCSE Annual Conference on Innovation and Technology in Computer Science Education, 2021 (online).
- Remote Teaching with Eric Mazur, August 2020.
- PLU Division of Natural Sciences STEM Mentor Workshop, July 2020.
- Computing Research Association Broadening Participation in Computer Science Workshop, Summer 2020.
- PLUTO Pivotal Pedagogy Series, Summer 2020.
- PLUTO Institute Online Teaching Workshop, January 2017.
- ICER International Computing Education Research Conference, 2005, 2006, 2007, 2009, 2011, 2013, 2017, 2020, and 2021.
- PLU Summer Advising Workshop, August 2014.
- Council of Independent Colleges Chairs' Workshop, Spokane, WA, June 2014.
- Peer Instruction in Computer Science SIGCSE workshop, Denver, CO, March 2013.
- Committee on the Status of Women in Computing Research (CRA-W) Advanced Career Mentoring Workshop, San Francisco, CA, November 2012.
- Northwest Academic Computing Consortium (NWACC) sponsored workshop "Using Social Media to Enrich Learning Experience," Salem, OR, May 20-22, 2012.
- Workshop on Peer Learning at ICER, Providence, Rhode Island, August 2011.
- Workshop on qualitative research methods for Computer Science Education, Day 1–Berkeley, CA, August 2009, Day 2–Milwaukee, WI, March 2010.
- How People Learn an educational theory course at Evergreen State College, Fall 2006 and Winter 2007 quarters.
- DEBUG research group summer workshop, Federal Way, WA, May 2007 and May 2008.
- Statistics Bootcamp for Computer Science Education Researchers, Georgia Tech University, Atlanta, GA, September 2007.
- PhICER Second International Workshop on Phenomenography in Computing Education Research, University of Kent, Canterbury, UK, September 2006.
- Teaching with Lego Robots SIGCSE workshop, Cincinnati, Ohio, March 2007.
- Disciplinary Commons, a course portfolio workshop for regional community college and four-year faculty, Sept. 2005-June 2006.
- Member and facilitator of a year-long PLU Wild Hope Faculty Study Seminar on vocation, 2006.
- PLU Center for Teaching and Learning (CTL) workshop on learning styles, 2003-2004.

Bootstrapping Research in Computer Science Education participant

- Initial Workshop, Port Townsend, WA, June 1 6, 2002
- Capstone Workshop, Port Townsend, WA, June 7 12, 2003
- SIGCSE Technical Symposium, 2000, 2002, 2003, 2005, 2007-2014, 2016, 2017, 2019, 2021-2023.

SIGCSE Paper Session Chair, 2013.

- Northwest Consortium for Computer Sciences in Colleges (CCSC-NW), 1999–2005, 2009, and 2012.
- CCSC-NW Paper Session Chair, 2012.
- Group and Cooperative Learning SIGCSE workshop, Cincinnati, Ohio, March 2002.
- CRA-W Managing the Academic Career for Faculty Women at Computer Science and Engineering Institutions, SIGCSE Workshop, February, 2002.
- Bridging the Digital Divide: Women and Girls in Tech Symposium, South Seattle Comm. College, July 2001. CSAC/CSAB Accreditation Training, Austin, Texas, March 2000.

Reviewing:

- Invited member of the International Computing Education Research Conference (ICER) Program Committee (2007, 2009-2014, 2018-2021).
- Journal Manuscripts: invited reviewer for *Communications of the ACM*, *Computer Science Education* and *ACM Transactions on Computing Education (TOCE)* (2009, 2013, 2014, 2016, 2019, 2020, 2021, 2023).
- Conference Papers: SIGCSE (2004–2014), ITiCSE (2005–2007), CCSC-NW (2001–2006, 2009).

Special Sessions: SIGCSE (2022–2023).

- Ph.D. Student Research: SIGCSE 2008 Doctoral Consortium Discussant, Portland, OR, March 2008.
- Grants: NSF Course Curriculum & Laboratory Improvement (CCLI) Phase I, invited reviewer, Washington, D.C., July 2007.

Textbooks:

- Gaddis, T., *Starting Out With Java: Control Structures through Objects*, 5th ed., Addison-Wesley/Person, 2013.
- Glass, G. and K. Ables, *Unix for Programmers and Users*, 3rd ed., Prentice-Hall, 2003. Lewis, J. and W. Loftus, *Java Software Solutions*, 4th ed., Addison-Wesley, 2005.

SERVICE

University Service and Activities at Pacific Lutheran University:

- Faculty Marshall, PLU Commencement (2023)
- Institutional Representative, Independent Colleges of Washington, Computer Science Statewide Transfer Degree Working Group (2021-present)

STEM Scholar Mentor (2020-present)

- Member, Innovation Studies Committee (2018-2021)
- Interviewee, Computer Science Department promotional video (2020)
- Member, Educational Policies Committee (EPC) (2008-2010, 2017-2020)
- Secretary, Educational Policies Committee (EPC) (2017-2018)
- Member, Division of Natural Sciences Data Science working group, developed new Data Science Minor (2017-2019)
- Volunteer, PLU Computer Science Department High School Programming Contest (2017-2020)
- EPC Representative, PLU Budget Advisory Committee (2009-2010, 2018-2019)

Member, Faculty Joint Committee (FJC) (Fall 2017)

Member, Wild Hope Meant to Live Planning Team (2015)

- Faculty Sponsor, PLU Student Chapter of the Association for Computing Machinery Women in Computing (ACM-W) (2012-2013)
- Faculty chaperone for women Computer Science majors attending the Northwest Regional Women in Computing Conference, Portland, Oregon (April 2012, October 2013, April 2015, April 2017)
- Mentor to a Washington Achiever Scholar majoring in Computer Science (2010-2013)
- Facilitator, Explore! Student retreat on vocation (January 2011)
- Member, Faculty Affairs Committee (FAC) (2012-2013)
- FAC Representative, PLU Benefits Committee (2012-2013)
- Member, Division of Natural Sciences Strategic Planning Committee (2012-2013)
- Interim Coordinator, The Wild Hope Project on Vocation (2009-2010)
- Member, Wild Hope Project Coordinating Team (2007–2013)

Member, Human Participants Review Board (2010-2013) Human Participants Review Board Division of Natural Sciences Unit Designate (2005–2006, 2007–2013) Member, Campus Life Committee (2004–2006) Departmental Library Liaison (2002–2006, 2010-2012) First-Year Advisor (2002-2003, 2003-2004, 2014-2015) Chair, CS Faculty Search Committees (2000, 2015, 2016, 2017, 2018, 2023) Member & Diversity Coordinator, CS Faculty Search Committee (2022) Member, Division of Natural Sciences Administrative Associate Search Committee (2004) Member, Mathematics Faculty Search Committee (2002) Chair, Division of Natural Sciences Systems Administrator Search Committee (2001) Member, CSCE CS1/CS2 Outcomes Committee (2003)

Community Service:

- Workshop presenter, "Programming in Scratch," American Association of University Women (AAUW) Tech Trek Summer Camp for middle school girls, July 2014, July 2019, July 2022 and July 2023.
- Microsoft TEALS Volunteer Co-taught Introduction to Programming using SNAP! remotely for Chief Sealth High School, Seattle, WA, Fall Semester, 2021-22.
- Volunteer, Vote Save America made calls and texts to prospective voters, Fall 2020.
- Volunteer, Vote Forward wrote letters to prospective voters, Fall 2020.
- Microsoft TEALS High School Computer Science Fair attendee representing Pacific Lutheran University, Redmond, WA, March 2019 and December 2019.
- Interviewee, Mississippi Gulf Coast Community College CS Professionals Video Podcast series, January 2018
- Volunteer, Thurston County Food Bank. Created an online data entry form for the food bank's bi-annual client survey and presented preliminary data analysis to the TCFB Board, Fall 2013.
- Tutorial presenter, "Programming in Scratch," MESA Saturday Academy, April 2013.
- Parent volunteer, Washington Middle School, Olympia, WA, school play t-shirt coordinator, 2014.
- Parent chaperone, Girl Scout Troop 45033, Olympia, WA, 2013-2015.
- Parent volunteer, Pioneer Elementary School, Olympia, WA for various activities (e.g., PTA auction computer support, fall carnival, field day, ticket sales, t-shirt sales coordinator), 2008-2014.
- Workshop presenter, "Programming in Scratch," Washington Middle School sixth grade girls' sci-tech classes, January 2008.
- Workshop presenter, "The Wonder of Alice," Expanding Your Horizons, a math, science and technology conference for middle-school girls sponsored by IGNITE and UW-Tacoma, March 2005 and March 2006.
- Volunteer chaperone, Expanding Your Horizons STEM conference for girls, March 2004.
- Volunteer sail car competition judge, MESA (Math Engineering and Science) Day, a science competition designed to encourage minority middle and high school students in STEM, 2004 and 2005.
- Guest speaker, Tech Specs: Inviting Young Women Into Technology, an Intel sponsored afterschool program for high school girls. Olympia High School, May 2002.